Indiana Uniform Property Tax Management System – Feasibility Study

Presented to the Commission on State Tax and Financing Policy

Indiana Department of Local Government Finance
Beth H. Henkel, Commissioner
Kostas A. Poulakidas, Deputy Commissioner
100 North Senate Avenue, N-1058(B)
Indianapolis, Indiana 46204
Phone: 317.232.3777
Fax: 317.232.8779

Integrated Systems – Uniform Data – Responsive Government

Indiana Department of Local Government Finance

Indiana Uniform Property Tax Management System – Feasibility Study

Table of Contents

Executive Summary

Introduction

Section 70 of Senate Enrolled Act 1-2004 requires the DLGF to evaluate the feasibility of establishing a uniform and common property tax management system. Technological advances in computer software systems and the court-mandated requirement that Indiana fundamentally modify its property tax system provide a unique opportunity for the State to implement uniform systems statewide. This report presents a range of options and makes recommendations for the General Assembly to consider in implementing a uniform and common system.

Current Property Tax System Environment

Currently, many vendors provide mass appraisal (CAMA) systems and separate auditor and treasurer systems in a number of different configurations. None of the assessor systems is integrated with the auditors' computer systems. The lack of integration of these systems creates significant manual work, makes quality control exceedingly difficult, and invites error. Moreover, the data are not entered into the system or provided electronically to the State as required by state law. While nearly all counties have provided data to the State in the required structures, parcel numbers, taxing district numbers, and other essential data are missing. Only one county is providing sales disclosure data electronically, although not in the required structures. Because of these problems, accurate fiscal and tax shift analysis is exceedingly difficult.

Benefits and Opportunities of a Uniform Property Tax System

A uniform property tax management system would provide multiple benefits:

Integrated Systems Using Web-based Technology Enhance User Access

As Indiana moves to a market value system, it has the opportunity to take advantage of recent advances in computer technology. Several vendors have integrated or are in the process of integrating the assessment and auditor systems in other localities. These Web-based systems enhance functionality by incorporating other county systems such as GIS. They eliminate duplicative work in several county offices, permit prompt and accurate local and state information exchange, and make quality control feasible.

Uniform Data Entry Is Essential to Maximize Benefits

The implementation of an integrated system must be coupled with standardization of data entry regarding assessment, billing and ownership. If county and local officials use consistent codes, guidelines and procedures, it would permit enhanced ability for quality control, consistent oversight, improved distribution of information, and prompt, accurate analysis.

Most Important: Responsive Government

For Taxpayers – Informed taxpayers, improved customer service, and 24/7 access to information via the Web.

For Policy-makers – Accurate and readily available information for informed decision-making regarding property taxation policy and its effect on taxpayers.

For Local Government – Cost savings on hardware and software; efficient and less costly management of the process; accurate and readily available information for informed decision-making at the local level.

For the State – Efficient management of the statewide process and interaction with counties; vendor conformity to contract expectations and pricing; better accounting and capturing of costs.

Barriers to Implementing Uniform System

During the study, several local officials stated that they were content with their current systems. They expressed concern that they would be mandated to use a system that was not as functional as their current system and that they would not be provided sufficient technical support. Other counties expressed eagerness to work with the State to implement a system that meets both local and state needs for information. Vendors expressed concern that a single system would reduce competition and ultimately provide Indiana with less innovation and greater expense.

Ultimately, implementation of a single software solution requires collaboration with local officials, a reconfiguration of the State agency's staff, careful development of standards that meet the State, local and taxpayer needs, and a phased roll-out. Funding would be required at the state level. Care must be taken to offset state funding with reductions in local expenditures.

An interim solution of developing and enforcing compliance to uniform standards also has barriers. Compliance requires local officials to commit to entering data at the local level using the State's parcel numbering system and ensuring that other data elements are entered accurately and uniformly. It also requires local and vendor commitment to providing the data to the State in electronic form. Finally, the DLGF must have the authority to require compliance with assessment and computer standards.

Applicable Statutory Authority

The DLGF has current statutory authority to impose standards for mass appraisal (CAMA) systems. Its authority to impose standards on the auditors' systems is unclear. The authority of the DLGF should be expanded and clarified in this area.

Costs

The costs of managing and implementing the current system cannot be accurately calculated because current accounting systems at the local level do not track expenditures by discrete functions. Cost savings from a uniform system are likely but unpredictable at this stage. The State's buying power, online filing and elimination of duplicative hardware and software would contribute to these savings.

Other States' Perspectives

States have varying methods of managing their property tax systems. States that have statewide systems used various means, including explicit statutory authority to mandate the approach, incentives such as free training and support, and funding mechanisms such as per parcel costs or record access fees.

Primary Recommendations

This report lists several options for implementing a common and uniform system:

Option 1 – Maintain the Current Situation

Option 2 – Develop and Enforce Tougher Software Standards

Option 3 – Develop Multiple (two to four) Software Solutions Implemented in Each County or Region

Option 4 – Develop a Single Software Solution to be Implemented in Each County or Region

Option 5 – Develop a Single Software Solution Hosted at the State to be used by Each County

The DLGF recommends implementing Option 2 under expanded rule-making authority to require all counties to provide data electronically in uniform structures using state-mandated parcel numbers and taxing district codes. The Legislature should consider implementation of either Option 3 or Option 4. Option 4 would provide a higher degree of uniformity and economy of scale than Option 3.

Areas for Consideration

Computer Standards

The primary computer standard (50 IAC 12-1-1) was written more than six years ago when real property was assessed on a replacement cost depreciated basis, not a market value in use basis. The replacement cost depreciated basis led to the development of a computer standard that was very detailed and data intensive so assessments could be independently verified using detailed cost-calculation tables. Current market value in use assessment requirements do not need the same detailed data such as wall height, number of bathroom fixtures, etc.

The standards were originally concerned primarily with making sure the mass appraisal portion of the software calculated the assessed values for real property correctly. The majority of problems with property tax management systems today come from the lack of integration of the assessment data with other required systems and inconsistent methods of data entry. To be effective, computer standards need to address all of the critical links in the property tax management chain, not just one portion.

✓ Recommendations

Software rules must be significantly modified to:

1. *Reflect changes in requirements due to the market value in use approach.*
2. *Reflect the current integration and distribution capabilities afforded by the Internet.*
3. *Include auditor/treasurer systems in the standards.*
4. *Require advanced functions like integration with GIS, e-forms, TIF management, and sales ratios.*
5. *Address quality standards and compliance reporting.*

Today's systems also require more advanced functionality than was needed or expected in the past. Functionality such as user friendly sales ratio studies, Tax Increment Finance (TIF) district management, quality assurance, and integration with GIS systems should be addressed and made part of the standards for any properly certified property tax management system.

Vendor Relationships

Software systems are sophisticated functionally and technically, putting the software vendor in a position of tremendous influence on an application where the county cannot afford a failure. The current vendor-county relationship minimizes the buying power of counties collectively, which could result in an overspending of tax dollars.

Computer system selection, contract price and term negotiation are currently managed individually among 92 different counties for seven different CAMA packages and nine different tax and billing packages. The State should leverage its buying power to enable counties to purchase software licenses and maintain software at reduced rates. Such services are currently available to local units through the State's Quantity Purchase Award program for many types of products and services. However, such services are not currently used for products that are primarily local in application.

✓ Recommendations

The State's buying power should be used to drive software contract price negotiation and save local units and citizens money.

Require all CAMA and property tax system contracts to include the DLGF as a direct party to ensure compliance.

Require State standard contract provisions to ensure cost-efficiency and system support.

State departments such as the DLGF, State Budget Agency, and State Board of Accounts have increasing needs to collect and analyze county data. IC 6-1.1-4-19.5 states that the DLGF shall develop a standard contract or standard provisions for contracts to be used in securing professional appraising services, and includes a provision stipulating that the Legislative Services Agency and the Department of Local Government Finance have unrestricted access to the contractor's work product under the contract. However, this provision does not currently address software contracts with CAMA and tax and billing system vendors. Similarly, 50 IAC 12 required contract provisions addressing the provision of data by CAMA vendors.

Enforcement

The DLGF has provided contract provisions, but it is not a party to the contracts entered into locally. Changing the vendors' business contractual relationships to ones that also bring in the State's expertise and buying power will help the State monitor and ensure that contracts are implemented and managed in accordance with State requirements.

Funding

Current computerization, software upgrades, assessment, reassessment statutory requirements, and other costs at the local level are paid through the county general fund or the county reassessment fund. The costs are thus primarily funded through property tax. Standard setting, rule making, training, and enforcement are paid for from State general fund appropriations to the DLGF. A portion of the statewide sales disclosure fees supplements the training budget.

County officials expressed concern during the reassessment and during this study that funding is not authorized locally for needed upgrades in the computer systems. State law does not currently provide for an appeal to the DLGF if necessary expenditures from the reassessment fund are not authorized. The General Assembly should consider authorizing such an appeal.

Current resources available to the State are insufficient to provide the appropriate funding required to implement a significantly modified or new system at the State level. Should the General Assembly provide for development of a common, statewide system, funds should be appropriated to the DLGF to implement the new system. Funding at the State level may ultimately be offset by savings locally.

✓ Recommendations

Adequate funding must be in place to ensure that local officials will comply with requirements and the State will receive the information needed to assure compliance.

In instances where a County Council has not appropriated sufficient funds for property tax management purposes, the DLGF should have authority to order appropriations from the Reassessment Fund.

Software Functionality and Limitations

Understanding the interconnected functions of the County Assessor, Auditor, and Treasurer within Indiana's property tax system is key to understanding the value of an integrated and standardized tax management system. However, both the CAMA and tax and billing software have their limitations.

Computer Assisted Mass Appraisal (CAMA) Software Functionality and Limitations

CAMA software is the intricate software application used by County and Township Assessors to appraise properties at a mass level. This complexity explains why data entry errors are commonplace. The lack of integration means that extensive data quality checking is essential. Quality control in the counties' values depends upon the availability of skilled staff to implement controls. Data collection involves documenting extremely detailed information regarding a property and its structures. Data entry staff must be familiar with the CAMA system in order to get all of the data entered accurately. CAMA systems in Indiana must also be able to load cost tables in order to price all types of properties. Assessing officials must also have the option to link neighborhoods of properties to base land rates. CAMA systems are expected to include all three methods of valuation, including sales comparison, income based, and cost approaches. In light of Indiana's property tax system prior to the St. John ruling, however, CAMA systems in Indiana are primarily cost-based.

Sketches and Digital Images

CAMA software should include other features in order to generate the most accurate and equitable results. Digital images, for example, are beneficial to assessing officials when they are working at their desks and are not in the field. They also are invaluable during the appeal process.

Sales Ratios

Sales ratio modules are essential now that Indiana has adopted a market value approach to assessment. Once values are calculated, sales ratio studies are performed in order to measure the accuracy of assessments. The sales ratio software modules need to present and explain the data in a way that can be understood and managed by local officials.

Personal Property

Personal property has been historically under-documented in Indiana. Personal property returns are manually filled out on paper forms. Rather than enter all of the information from personal property returns into a computer system, the majority of counties store electronically only the basic information such as a manually calculated total value of personal property and total value of each deduction associated with the key number. Not only is this transcription error prone, but it also eliminates the ability to perform accurate data analysis that includes personal property information.

Appeal Management

The appeal process can be a very long process involving the transfer of forms and information among several groups of people. Traditionally, the process is paper driven rather than accomplished by storing and transferring information electronically through an appeal module. CAMA systems typically do not maintain a history and appeal information is lost. Documentation of changes due to appeals is not uniform. The process leads to errors and taxpayer frustration.

Data Analysis and Quality Management

Other important functions of CAMA and tax systems are reporting and analysis that allow the user to review the massive amounts of data in the system. Many CAMA systems do not contain sufficient reporting options, especially in terms of data quality examinations. In the last several years, the DLGF has had to re-certify budgets on a number of occasions because of serious data errors that had gone undiscovered until very late in the process when tax rates had been approved. In other counties, data errors caused shortfalls in government units.

Transfer of Data to Auditor System

None of the software systems in Indiana are fully integrated, incorporating assessing, tax, and billing functions in one application. The Assessor's CAMA software must calculate residential and non-residential assessed values on properties that may have a homestead and export those values into a tax and billing software system. Often, this data does not "roll" accurately and class codes, which determine whether property is commercial, industrial, agricultural, or residential, are not rolled in most systems. The fact that class codes are not transferred makes a tax shift analysis difficult. A property tax management system that integrates the Assessor and Auditor systems would substantially help eliminate this problem.

Tax and Billing Software Functionality and Limitations

Once the assessment for each real property parcel, personal property taxpayer, and annually assessed mobile home owner is transferred from the CAMA system, the Auditor and Treasurer have significant information and data management needs to enter deductions, exemptions, and abatements; accurately bill taxpayers; collect tax payments and distribute the money collected to the taxing fund of each governmental unit. The Auditor enters data throughout the year based on the various deadlines for activities for deductions, exemptions, abatements, and units establishing tax increment financing (TIF) allocation areas.

Deductions

The Auditor is responsible for accepting deduction filings and applying them to a taxpayer's account if the taxpayer is eligible. Tax systems must include a method for this information to be entered, calculated, and applied to the recipient's account. Some tax and billing systems do not allow users to enter filings for the next tax year while the office is still working in the current year. Therefore, forms may accumulate until the system allows them to be entered.

Budgets

From the governmental side of the Auditor's responsibility, independent of the assessment function, the County Auditor receives copies of the budgets of each unit of government in the county to be transmitted to the DLGF. The DLGF reviews these budgets and finalizes the levy to be made for each fund.

Certification of Net Assessed Valuation

Each taxing district is made up of sets of overlapping lines among all units of government in the County. The Auditor's certification must be broken down among real property, business personal property, non-business personal property, bank personal property, homestead-qualified property, and captured NAV for tax increment financing areas. The DLGF needs the net assessed value and the Certified Levy for each fund of each unit of government in the County to calculate the tax rate for each fund and the Property Tax Replacement Credit (PTRC), Business Personal Property PTRC, and Homestead Credit. These rates are provided to the County Auditor, for data entry into the tax and billing system. A significant limitation is that the transfer of values and rates is primarily done on spreadsheets by email, which is error prone. Data entries must be checked and re-checked.

Tax Billing and Settlement

The Treasurer collects payments, applies credits, and informs the Auditor of corrections necessary to track for settlement and distribution to the units of government. The Auditor's settlement must be specific by fund for each unit in order to track whether the unit has collected in excess of its Certified Levy for Levy Excess purposes. This information is constantly changing due to personal property tax returns filed late, results of appeals, and corrections to assessments, abatements, deductions, exemptions and other information including bankruptcies. As a consequence, it is very difficult to get an accurate picture of information that is essential to the budget-setting process at the county and local government level.

CAMA and Tax Software Currently in Use in Indiana

Today, there are a variety of CAMA and tax management packages used in the State of Indiana. Overall, 14 products are being used in the 92 counties, as well as a number of in-house systems.

CAMA Package	Count
ACAMA (Manatron)	12
Proval (Manatron)	61
Appraisal Research	1
CLT	1
IDS	2
In-House	3
Plexis	12
Total CAMA Count	**92**

Tax Package	Count
CLT	1
Equitax	1
IBM	2
In-House	9
Legacy (Manatron)	33
Low	7
MHI	2
MVP (Manatron)	36
Unisys	1
Total Tax Count	**92**

Problems Caused by an Un-Integrated System

Inconsistencies and Lack of County Data

The current situation includes 92 unique software installations each involving various levels of customization. These systems have varying degrees of integration between packages, which are not necessarily developed by the same software developer. Data are not entered and stored consistently throughout the State. Therefore, as the State collects information it is nearly impossible to analyze the data and provide accurate information on which to base decisions or tax policy recommendations.

Lack of Compliance with Standardized File Layout

As of August 2004, 80 counties had provided assessment data and 51 had provided tax and billing data in the standard file format. Each of the counties, however, records information differently, making analysis difficult. Local officials have even modified standard coding guidelines issued by the State to suit their own preferences. Without standardized data in a consistent format, it is virtually impossible to compare property tax data between various taxing districts. Without accurate, consistent and linked data from the CAMA system, personal property returns, and tax and billing systems, it is virtually impossible to conduct research and analysis indicating shift in tax liability burdens that may result from a change in property tax public policy or law.

Lack of Vendor System Integration

Of the 92 potential opportunities for interfacing between distinct software packages, 18 different combinations of integration exist. There has been debate surrounding the successes and breakdowns of integrating various software packages. Indiana assessing officials refer to the integration of CAMA and tax systems as “interfacing” or “roll-over of values.” This terminology stems from the common situation in which the CAMA system calculates assessed values and passes them to the tax system through a loose integration without thorough data integrity inspections.

Oversight of Property Tax Management Systems

State law currently provides multiple sections of the Indiana Code that give the DLGF oversight authority over the assessment process and require counties to provide data to the DLGF in prescribed forms:

IC 6-1.1-4-18.5 Professional appraisal; contract for services; bids required

IC 6-1.1-4-19.5 Professional appraisal; contract for services; provisions

IC 6-1.1-5.5-3 Sales Disclosure form; forwarding; confidential information

IC 6-1.1-33.5-1 Establishment of division of data analysis

IC 6-1.1-33.5-2 Electronic database; software; data analysis; studies; reports

IC 6-1.1-33.5-3 Additional studies and reports

IC 6-1.1-33.5-4 Powers of division of data analysis

IC 6-1.1-33.5-5 Confidentiality of information

IC 6-1.1-33.5-6 Review; special reassessments

Similarly, the following provisions of Indiana Code designate the standards that county property tax systems should follow:

IC 6-1.1-4-25 Record keeping; electronic data files

IC 1`6-1.1-31.5-2 Rules

IC 6-1.1-31.5-3.5 State certified computer system

IC 6-1.1-31.5-4 Rules for statewide guidelines for standardized forms and notices

The Software Rule: 50 IAC 12-1-1 – Under the authority of IC 6-1.1-31.5, the DLGF promulgated rules in 1999 to set standards for computer systems used by Indiana counties for the administration of the property tax assessment process. These rules had the stated goal to attain uniformity in assessment practices, improve management and analysis at the local and state level, and provide assurance that software met the required functionality.

The rules are heavily cost-based and provide that the software systems must:

- Price all classes of property
- Produce files, reports, and allow local officials to design their own
- Have the ability to import, store, and export data
- Store and link to digitized photographs
- Be compatible with the data export and transmission requirements in a standard format prescribed by the DLGF
- Maintain all data concerning personal property

- Maintain and process all data concerning credits, deductions, and exemptions
- Provide all data and functions necessary to the computation of Net Assessed Value for real and personal property
- Comply with set parcel numbering standards
- Use required codes (e.g., property class, dwelling type, deductions and exemptions, sales disclosure type, etc.)

Vendor Eligibility & Certification

Rule 10 and 11 establish the requirements of vendors to be and stay eligible. There are some requirements defined for:

- Assessment software vendor eligibility and renewal,
- Computer services provider eligibility and renewal,
- Computer hardware provider eligibility and renewal, and
- Certification, change management, and recertification.

Enforcement Methods

IC 6-1.1-31.5-5 Revocation of certification

IC 6-1.1-31-1 Duties of department; rules

Rule 12 provides that if the DLGF finds the software system fails to meet the requirements of this article, it may:

- Decertify the system and forbid any new contracts, contract renewals, or contract extensions
- Impose specific conditions on continued certification of the computer system
- Require specific changes and new certification tests

Observations and Recommendations

While the DLGF appears to have several available tools that permit it to adopt and require compliance with software standards, they do not provide a framework to fund such a system. Should the DLGF enforce stricter requirements, counties could be faced with significantly increased costs. In addition, the DLGF is given power to enforce assessment rules among local assessing officials, although the DLGF's authority is not as clear with regards to private contractors and computer software vendors.

All of the counties had computer systems installed as of 1999, but none of the software systems met all of the requirements of the adopted rule. No vendor in the State of Indiana had a software system that met all of the requirements of the rule, particularly the data-export requirements. Because the DLGF was under Court order, the DLGF certified computer systems that accurately performed the reassessment function but that did not, at that time, require the systems to export all of the data that had been specified. Vendors were also unclear on how to comply with the data export requirements. Consequently, in 2003, the DLGF met with vendors, computer software specialists, and LSA to develop file structures that the vendors assured us could be provided. Still, the data exports that are being provided are inconsistent and incomplete. Although the software system rule required counties to enter data consistently, counties have not complied with these requirements.

The DLGF recommends a multi-pronged approach going forward: (1) Develop software standards in collaboration with the counties; (2) Issue an RFP based in large part on systems currently on the market or in development; (3) Provide incentives, such as training, software support, and coordinated buying power to local assessing officials for the purchase and maintenance of the State-approved computer systems; and (4) Strengthen contractual requirements among local units, service and software providers, and the State. Further recommendations for those counties that choose not to buy the State-authorized system include stricter enforcement of promulgated standards with fixed, realistic timelines for implementation.

Indiana County Feedback on Software Solutions

The DLGF collected feedback from an important stakeholder group – the local officials who would be primary users of a uniform tax management system. These individuals provided feedback regarding the current situation and pinpointed the critical functions that software should include.

Distribution of Future Objectives by Office

County Assessors

Functionality	Not Important	Nice to Have	Important to Have	Critical	Already Have
Digital Pictures	0.0%	26.8%	28.6%	10.7%	33.9%
Abatement Mgmt Sys	*32.5%*	*32.5%*	*22.5%*	*10.0%*	*2.5%*
Electronically Integrated Budget Sys	11.1%	33.3%	42.2%	11.1%	2.2%
TIF Programs	*17.1%*	*56.1%*	*12.2%*	*12.2%*	*2.4%*
Electronic Integration with State	12.2%	29.3%	36.6%	22.0%	0.0%
Integrated CAMA and Tax	**2.0%**	**11.8%**	**37.3%**	**37.3%**	**11.8%**
Appeal Scheduler	10.0%	40.0%	16.0%	14.0%	20.0%
Electronic Cadastral Mapping	**2.0%**	**20.0%**	**48.0%**	**12.0%**	**18.0%**
Exemptions Mgmt Sys	8.9%	24.4%	35.6%	17.8%	13.3%
Internal Financial Mgmt Sys	20.5%	33.3%	30.8%	10.3%	5.1%
Web Forms for Online Filing	8.2%	36.7%	34.7%	14.3%	6.1%
Deductions Mgmt Sys	23.3%	30.2%	18.6%	20.9%	7.0%
Document Scanning	3.9%	25.5%	29.4%	11.8%	29.4%
Tax Sale Mgmt Sys	*34.1%*	*29.3%*	*19.5%*	*12.2%*	*4.9%*
Better Analytical Software	4.1%	20.4%	30.6%	28.6%	16.3%
Electronic Data Collection	5.8%	44.2%	38.5%	11.5%	0.0%
Integrated GIS System	**0.0%**	**10.9%**	**30.9%**	**18.2%**	**40.0%**
Parcel Info Available Online	**7.3%**	**10.9%**	**32.7%**	**20.0%**	**29.1%**

County Auditors

Functionality	Not Important	Nice to Have	Important to Have	Critical	Already Have
Digital Pictures	10.0%	36.7%	26.7%	6.7%	20.0%
Abatement Mgmt Sys	**2.9%**	**11.8%**	**41.2%**	**38.2%**	**5.9%**
Electronically Integrated Budget Sys	*16.1%*	*48.4%*	*32.3%*	*3.2%*	*0.0%*
TIF Programs	17.2%	6.9%	44.8%	17.2%	13.8%
Electronic Integration with State	0.0%	37.5%	34.4%	18.8%	9.4%
Integrated CAMA and Tax	**0.0%**	**16.1%**	**22.6%**	**38.7%**	**22.6%**
Appeal Scheduler	*16.0%*	*48.0%*	*28.0%*	*8.0%*	*0.0%*
Electronic Cadastral Mapping	11.1%	29.6%	22.2%	18.5%	18.5%
Exemptions Mgmt Sys	**0.0%**	**3.1%**	**37.5%**	**43.8%**	**15.6%**
Internal Financial Mgmt Sys	0.0%	25.0%	28.6%	17.9%	28.6%
Web Forms for Online Filing	0.0%	56.3%	31.3%	6.3%	6.3%
Deductions Mgmt Sys	**0.0%**	**3.2%**	**32.3%**	**45.2%**	**19.4%**
Document Scanning	3.2%	48.4%	32.3%	3.2%	12.9%
Tax Sale Mgmt Sys	3.3%	20.0%	26.7%	36.7%	13.3%
Better Analytical Software	0.0%	31.0%	37.9%	24.1%	6.9%
Electronic Data Collection	*4.0%*	*44.0%*	*32.0%*	*20.0%*	*0.0%*
Integrated GIS System	3.1%	21.9%	28.1%	18.8%	28.1%
Parcel Info Available Online	9.7%	32.3%	29.0%	9.7%	19.4%

County Treasurers

Functionality	Not Important	Nice to Have	Important to Have	Critical	Already Have
Digital Pictures	*18.2%*	*45.5%*	*18.2%*	*0.0%*	*18.2%*
Abatement Mgmt Sys	20.0%	15.0%	40.0%	20.0%	5.0%
Electronically Integrated Budget Sys	*4.8%*	*61.9%*	*19.0%*	*14.3%*	*0.0%*
TIF Programs	33.3%	19.0%	23.8%	19.0%	4.8%
Electronic Integration with State	4.8%	57.1%	23.8%	14.3%	0.0%
Integrated CAMA and Tax	**9.5%**	**9.5%**	**42.9%**	**23.8%**	**14.3%**
Appeal Scheduler	31.6%	26.3%	31.6%	10.5%	0.0%
Electronic Cadastral Mapping	11.1%	38.9%	27.8%	5.6%	16.7%
Exemptions Mgmt Sys	9.5%	33.3%	4.8%	42.9%	9.5%
Internal Financial Mgmt Sys	0.0%	30.0%	40.0%	20.0%	10.0%
Web Forms for Online Filing	15.4%	23.1%	38.5%	15.4%	7.7%
Deductions Mgmt Sys	15.0%	30.0%	10.0%	35.0%	10.0%
Document Scanning	*9.5%*	*52.4%*	*28.6%*	*4.8%*	*4.8%*
Tax Sale Mgmt Sys	**4.3%**	**8.7%**	**43.5%**	**34.8%**	**8.7%**
Better Analytical Software	14.3%	28.6%	28.6%	28.6%	0.0%
Electronic Data Collection	*11.1%*	*50.0%*	*22.2%*	*11.1%*	*5.6%*
Integrated GIS System	8.3%	33.3%	37.5%	8.3%	12.5%
Parcel Info Available Online	7.7%	23.1%	42.3%	15.4%	11.5%

Highest rate of response indicating it is not important or nice to have
Highest rate of responses indicating it is important to have, critical, or they already have it

Local Official Feedback

Major Problems with Current Systems

Inconsistent practices of local officials, blurred lines of responsibility among offices, system workflow issues, and territorial attitudes – points to the process – not the technology in use.

Lack of accessible data and multi-year systems prevents users from accessing historical information.

No ability to share information. A number of taxpayers do not have access to information online. In addition, passing data between or among different systems is not 100% reliable.

Management of Tax Increment Financing.

Most Important Functionality

Accurate and straightforward management of Tax Increment Financing.

Elimination of duplication of work and manual entry.

Ability to share compatible, consistent data.

Reliable and timely IT support.

Multi-year system.

Enhanced budget planning modules.

Software support, maintenance, and updates.

Expected Benefits

Rapid implementation of legislated updates to the software.

Increased efficiency and cost savings from sharing data and making it available online.

Expected Barriers to Implementation

Pleasing everyone. How do we get 92 counties' offices agree on functionality and needs?

Resistance to change at the local level.

Impact on current software vendors. How does this affect new or existing contracts? Will vendors withhold data from their counties?

Lack of competition could slow technical support if there is no incentive for timely response to issues.

Data conversion.

Fair method of funding statewide.

Cost to taxpayers.

Customization of one software system to meet needs of 92 diverse counties.

Training, quality assurance, and quality control.

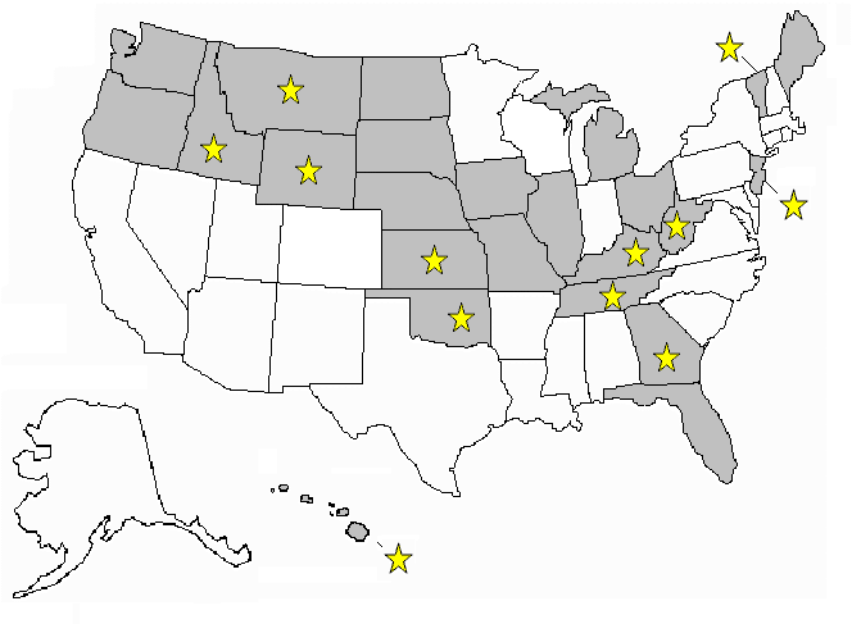
Property Tax Management in Other States

Information was collected from other states' government finance agencies on their current systems, state agency to local government relationships, funding alternatives, barriers to implementation, lessons learned, and best practices. Each state was contacted and 24 of those responded.

States Providing Feedback Regarding Property Tax Management Systems

Florida	Maine	Oklahoma*
Georgia*	Michigan	Oregon
Hawaii*	Missouri	South Dakota
Idaho*	Montana*	Tennessee*
Illinois	Nebraska	Vermont*
Iowa	New Jersey*	Washington
Kansas*	North Dakota	West Virginia*
Kentucky*	Ohio	Wyoming

* Denotes states with statewide systems



Statewide System Implemented

Twelve of the 24 states where feedback was collected have some type of statewide system in place. Of these, no two systems were precisely technically or organizationally alike in design.

Types of Authority and Incentives for Statewide Systems

In some states, when an agency does not have authority to mandate a system but desires one, developing incentives for potential users becomes as important as the system itself. Examples of incentives being offered nationwide are:

- Cost/Performance – Some states have implemented systems that are both reliable and user-

friendly. Counties find the product as attractive as other vendors' products and have chosen to financially support the State's system to maintain consistency. Some states have found it less expensive for counties to financially support a statewide system development than to purchase a new system for its use.

- State Funding – A major incentive to potential users of a statewide system is that they do not have to pay for the software. Some states implement fees for services such as for support and training.

- Use or Procurement of a Statewide System is Mandated – Few states have statutes in place to enable them to mandate use of a specific software system. For those that do, however, it has proven to be an important factor.

- Statewide System Managed by Local Users -- One state had a users' group to procure and manage a computer system utilized throughout much of the state. This group, composed mainly of local assessing officials, congregated to discuss requirements for a system, wrote an RFP, and finally contracted with a vendor to develop a system. Today, the statewide system is implemented in more than 60% of the counties and is managed by the user group.

✓ Recommendations

The State should adopt incentive-based approaches deemed successful in other states. The General Assembly should consider legislation making these opportunities possible.

- Training – States have been able to promote a statewide system by offering technical training to counties that adopt it. This is attractive to counties that have contracted with vendors out of state, where on-site training is costly and difficult to schedule.

- Software/Technical Support – States answered this concern by providing software/technical support and establishing a formalized help desk for local questions or requests.

Funding Mechanisms

States with statewide systems possess a variety of funding arrangements:

Open Records Access Fees

Some states have successfully funded a statewide system program through open records access fees.

Per Parcel Fee for Software and Support

Another alternative is to charge user counties on a per parcel basis. This method aids smaller counties that cannot pay the same percentage of costs as larger counties with larger populations, operating budgets, and needs.

Direct State Appropriations and "Regionalization"

One option attractive to participants is direct appropriations to fund a statewide property tax system. This alternative is not always an option, but states able to receive such funding may find regionalization effective if mandated. Regionalization involves the state agency requiring statewide program participants to possess a specific level of parcels in order to apply for funding from the state. Counties enter into interlocal agreements to share systems. This cuts down on costs, and eliminates hardware that would otherwise need support.

No Statewide System in Place

Nine of the 24 states that were sampled currently do not have a statewide property tax system. More specifically, there is no existence of a computer system for CAMA, tax, or billing purposes that is being used by a majority of counties or municipalities.

Systems Overview

This section describes the components of a possible uniform tax management system. The schematic diagram in this section includes three major segments. Shown in blue are those primary functions that a property tax management system would be expected to perform at the local or county level. Green items portray those functions or systems that would be housed at the state level. Red items represent functionality that could be provided through the primary property tax system or through an integrated solution by a third party vendor.

Primary Functionality Expected

Mass Appraisal Functionality (CAMA)

Items expected in property tax management systems at the local level are shown in blue in the schematic. These items are not all included in the current systems throughout Indiana. Some items, such as the ability to value property by the three standard approaches, or the ability to sketch properties are already standard functions of all CAMA systems. However, adequate functionality for reporting needs, sales ratios, and digital pictures are currently not found in all Indiana systems. Any common, uniform property tax management solution should include integrated functionality for all of the items listed in the diagram.

Tax and Billing Functionality

Items that one should expect a property tax management system to provide on the tax and billing side are also shown in blue in the schematic. Some of these items are not included in all current Indiana software systems; however, this functionality is important for effective and accurate tax and billing operations. Most systems currently include modules for application and calculation of deductions, including deductions for the blind, veterans, and homesteads, as well as abatement applications. Current systems typically perform billing and settlement functions as well. Tax and billing systems sometimes lack adequate reporting to help identify all errors that need correction. Many counties have communicated that the TIF program functionality is difficult to work with. Tax and billing systems should minimally include strong functionality for the modules identified in the schematic if they are to provide adequate services to local government users.

Primary Functionality for State Agencies

State agencies are important users and providers of the county data and information. These primary functions are shown in green in the schematic. Currently, agencies such as the DLGF, LSA, and SBA maintain their own systems that do not interact with local government systems. However, the State, and DLGF specifically, does have a number of responsibilities that require interaction with the local governments including the critical functions of the budget order process and setting of tax rates. The DLGF also performs a number of assessment functions such as personal property abatements and state assessed utilities. Standards for a common and uniform system should recognize this data integration requirement and provide sufficient features that would automate data transfer needs.

Integration Needs

Many problems of current county systems involve the insufficient sharing of data between the different components of the overall property tax management solution. In many cases, this is due to the county purchasing core software from different vendors, or from vendors putting together a solution from a number of different acquired companies. The following gives a general description of the difference between “integration” and “interfaced” systems:

Integration	Two computer systems or modules that share data in real time, interactively. For example, a change made to an assessed value in the CAMA system due to an appeal would immediately be seen in the tax and billing system.

Interfaced	Two computer systems or modules that send data back and forth periodically, through a "batch transfer" or "rolling" process. These systems could have two conflicting sets of data at one time, because updates from one system have not yet been put into the other. This process is error prone.

The State data requirements should also be part of the standard, required functionality of systems. Today, information is generally transferred back and forth through paper or CD-ROMs, often requiring manual keying of information. County systems should have standard functionality that could interface with the DLGF. For example, today the DLGF receives counties' sales ratio studies in spreadsheets or other tools through either email or mailed CD-ROMs. Sales are not entered into the CAMA system and many counties do not take advantage of functionality in their systems. This is inefficient and makes the equalization process slow and cumbersome.

Benefits of an Integrated System

If the county systems were instead integrated with the State systems, the DLGF could run its own sales ratio calculations on top of the counties' live data. The State could accept appeal information electronically, rather than via hard-copy forms. The State could also receive sales ratio information electronically directly from the county systems, rather than having field staff physically travel to counties and photocopy papers to be periodically brought back to the State for filing. Most importantly, and because the ability does not exist currently, the DLGF could examine county data and substantiate the performance of the counties' operations.

Additional Functionality Offered by Third Party Vendors

The schematic also describes other potential functionality that a common and uniform property tax management system should provide. A third party vendor could either offer these features or they could be built into the core CAMA or tax and billing system.

One example, not commonly used in Indiana is e-forms. E-forms enable taxpayers to complete and submit forms online, rather than filling out a paper form and physically turning it into the Auditor's office.

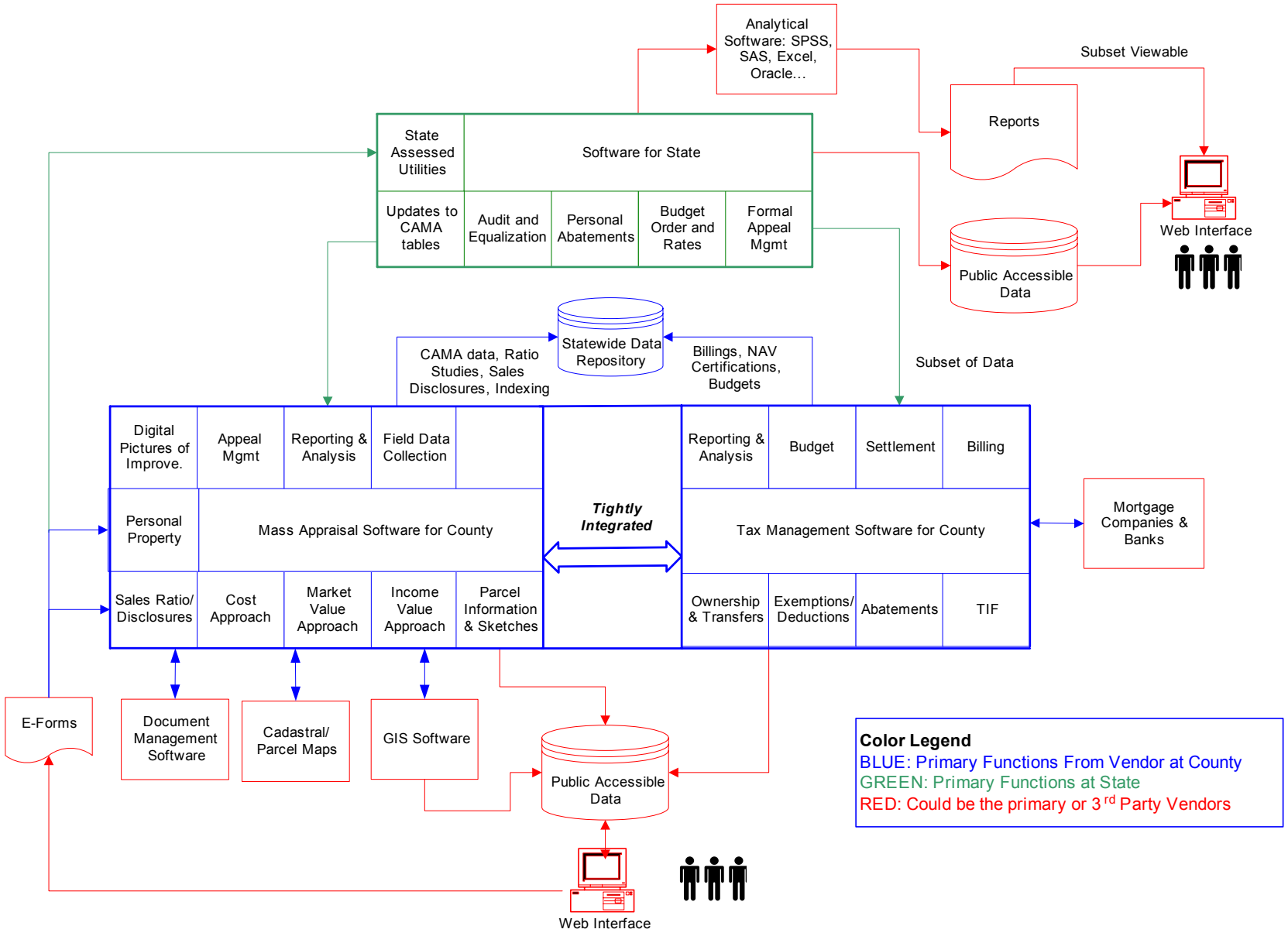
From the counties' perspective, sales disclosure data could be electronically submitted to the assessing officials with the associated fee, eliminating data entry in many cases. Similarly, personal property returns could be submitted electronically, eliminating paper and decreasing work and errors at the township and county level. E-forms options would not only cut down the stream of people that come through the Auditor's office to file, but also could cut down on data entry and paper file retention if the full functionality were included.

✓ Recommendations

Any proposed solution must include the primary functionality for Auditor, Assessor, Treasurer, and State Agencies.

Local officials need to work with the State to identify which additional functionality is most important.

Schematic of County Enterprise Integrated with the CAMA and Tax Systems



DLGF State Systems and Integration Requirements

The DLGF has a number of computer systems in place to help administer and manage the significant volume of data and interactions between the State and each of the 92 counties throughout the year.

Statewide Parcel Level Property Assessment and Tax Database

Although the State has received data from a number of counties, the data has been incomplete or inconsistent in a number of instances. Major reasons for these two process limitations are as follows:

Data not Received

Counties with older systems are more likely to have difficulty getting the data in the format prescribed by the State. Data manipulation is increasingly difficult as technology continuously advances and programmer expertise in these old systems diminishes. Some software vendors are charging counties an additional fee to provide the necessary data and counties are hesitant to pay this fee due to limited budgets.

Data is not Complete

Some counties use old or limited functionality systems that do not retain numeric values that are requested in the file layouts. An extremely important and often critical missing piece is electronic sales disclosure data. The majority of counties have not been successful in providing sales data in the State standard format. For the State to perform any analysis on the performance of reassessment requires adequate sales information from all counties.

Data is not Consistent

Another limitation is the inconsistency in data not only among counties, but also within counties. Some counties have chosen to modify these standard code tables to fit their preferences at the local level by changing the meaning of the codes within their jurisdictions or by adding codes, as they deem necessary. This lack of consistency becomes a major impediment to any type of data analysis effort, as it is problematic to translate the manipulated codes back into the standard code table.

Other DLGF Databases

Other DLGF systems are largely not integrated and require manual entry of data into custom Microsoft Access databases. The personal property data in systems should be entered and managed as part of county CAMA and tax and billing systems along with sales disclosures. This data could be automatically shared through secure transmission between county and the State through the Internet. Integration provides an opportunity to automate and improve the timeliness and quality of these systems with improved county CAMA and tax and billing systems.

Citizen Access to Assessment and Tax Data

Citizen's expectations for the availability of information on the Internet are increasing. Displaying information over the Internet not only provides a service to taxpayers; it also helps ensure continued accuracy by having taxpayers perform a policing function to make sure data is correct.

Benefits of an Integrated System

Many opportunities have been discussed throughout this report. Some of these are difficult to accurately quantify, but have very real financial impacts on local and state government:

- Better-informed citizens – A common look and feel to county websites that display property tax data will enhance citizen confidence in consistency of appraisal and tax policy.
- Better decision making – Accurate information will allow decision makers at the State and local levels to make more informed decisions regarding property taxation policy and its effect on taxpayers.
- Software and hardware cost savings – Real savings will be realized through the State's buying power.
- Contract compliance – Conformity to contract expectations can be improved through monitoring and quality checks.
- Enhanced ability to audit data.
- Better and consistent data from common platforms will allow for easier analysis.
- Internal transformation – A statewide system will provide a catalyst for state and local governments to re-evaluate their current operations and staffing and implement improvements.
- Improved customer service – 24/7 access to information via the Web and faster response time for taxpayers.
- Improved employee development – Often staff have either been under-trained or never trained on the software applications they use.
- Better information distribution – Improving collection of data allows for revenue generating opportunities for the State in sharing access to that data.
- More efficient and effective processing.
- Cost savings to businesses and citizens – By using the average direct costs of postage, printing, gas and travel, professional fees and personnel time for businesses, and by determining how many of those are eliminated by using e-government applications, the State and local government can determine cost savings.
- Better accounting and capture of real costs – Consistent software and processes will allow for more consistent collection of costs and savings.
- Increased revenue from collections and compliance.
- Consistent software support and training.
- Faster implementation of legislative changes – Updates to computer systems made one time, rather than 92 times among different systems.
- Reduced reliance on vendors in performing assessment functions – A uniform system allows county officials to make updates without technical assistance.
- Reduction in overtime – A uniform system creates a more efficient workplace, with less focus on manual tasks.

Potential Software Approaches for a Common and Uniform System

The ultimate approach for a common and uniform system could take shape in a continuum of options. Each of these forms will vary in the degree of difficulty to implement statewide, the cost of the change, and the resultant benefit towards moving to a new approach.

Option 1 - Remain as Today – Many independent systems with loose standards.

Approach: This is the path of least resistance and is the least costly to implement. The 92 counties will continue to independently pay software costs without leveraging the buying power of the State. Software vendors would be expected to continue to operate as they have in the past and provide counties with the same level of system support. There will be a lack of incentive for vendors to develop new and better technologies for the State, counties, and taxpayers. Counties will continue to piece together custom or package solutions from a variety of CAMA and tax vendors to manage their property tax issues. A lack of integration and quality control measures will result in continued delays, lack of data for policy-making, and continued errors that will affect taxpayers' tax rates and bills. There will be a wide variety of data formats and software capabilities from county to county.

Results: No significant change in service, quality, or costs.

Option 2 - Tougher Standards – Many independent systems, stronger enforcement, and State contract oversight.

Approach: In this approach, the breadth of the existing software standards would be increased in order to fill current information gaps (i.e., the standards would be expanded to include Auditor and Treasurer functions). Enforcement of these higher standards would be more rigorous. This might cause weaker software systems to no longer qualify under the minimum standards of the State. It may also cause certain connected pieces of software to fail to meet integration requirements without major improvement. In this option, the State would begin to exercise itself as a party to software contracts. This may present the opportunity to negotiate statewide pricing for some vendor solutions. However, with many qualified, alternative vendor options, it is unlikely that vendors will provide pricing that will reflect true economies of scale.

Results: Some of the problem areas in software functionality can be addressed and filled. Overall quality of software and data would improve. The State may be able to influence contract pricing to a limited extent. The assessment vendor business model should start to change over time to include the needs of the State, in addition to the needs of the county.

Option 3 - Several Solutions – A few, approved CAMA/tax combinations.

Approach: This approach is an expansion of option two. In this case, software vendors will need to significantly improve functionality, support, and quality in order to "make the cut" as one of the two to four certified CAMA/tax solutions. Those six to ten software vendors in Indiana that currently offer the lowest quality and/or the highest prices will no longer be viable options for counties because they will not meet the minimum expectations of the State for this process. Some vendors may only "qualify" to host counties meeting certain criteria (based on population, number of parcels or other identifier).

Results: A number of counties would migrate from their existing lesser quality, older, or higher priced software to an improved, more functional CAMA/Tax system. By reducing the number of allowable software combinations, the State and counties will be able to develop better, stronger relationships with the remaining vendors. Statewide price

negotiation may cut county costs and encourage vendor competition in order for them to maintain or increase market share. Vendors will need to keep counties on current, approved versions of software rather than supporting many old versions of different software packages, custom written for Indiana, or just for a particular county. If the number of qualified systems drops to a small enough number, then the DLGF will be in a position to have field personnel develop expertise in this standardized software and give counties better support and training.

Option 4 - One Solution – A single approved vendor, with county and/or regional installations.

Approach: This solution is an extension of option three, resulting in a selection of only one vendor solution. Here, the results of a statewide RFP would result in one vendor providing the best integrated CAMA and tax software solution at the best price. The vendor would be a strategic partner with the State, and the State would be heavily involved with the rollout of the uniform system. The one vendor solution is a similar approach as was taken with the Case Management Software solution for the Indiana Courts system.

Results: The winning vendor would bring a solution with extremely aggressive pricing and extraordinary focus on bringing success to the entire State of Indiana. The State will have a greatly simplified experience sharing data with all counties on the single solution. Citizens throughout Indiana would have a common look and feel to their property tax and sales disclosure information on the Internet. Integration of electronic forms and integration with other packages such as GIS would also be simplified since there would only be one system. This simplified approach will speed technological improvement and bring greater efficiencies. Counties will also be able to easily share best practices and advice among themselves and with the State. This will greatly reduce dependence on vendor support and duplicate payments for the same programs and training. However, counties that have spent considerable time and money developing their systems, which they may prefer, would be highly resistant to change.

Option 5 - One Solution, One Installation – Single approved vendor, hosted by the State.

Approach: This solution is an extension of option four, with one approved vendor. The key difference in this approach is that the software solution would be installed and maintained by the State in a central or several regional installations rather than 92 counties. This minimizes hardware and support costs for running the system. It would increase dependence on the Internet's communications infrastructure so all townships and counties could connect to the central installations. This is the approach taken by the Bureau of Motor Vehicles STARS system.

Results: Same as above, but also with significant reductions in hardware costs, operating costs, vendor support costs, administrative costs, and technical personnel needs. Backups and recovery, security and overall system safety should improve. Additional financial and staffing support would need to be provided to the DLGF to maintain this option on a statewide basis.

Financial Considerations

While assessment is administered at the township level of government, the costs of assessing and reassessing are paid through county funds rather than township funds. The costs of annual assessor duties (township or county level) are paid for out of the county general fund. The costs of billing and collection portions of the property tax system are also paid as a normal part of the county general fund budget. The total cost of the assessment process is not separately tracked in county budgets. Certain general costs (computer systems and support and indirect costs of operation) are not recorded in a way that can be identified and tracked separately. Therefore, there is no readily identifiable information of the total annual statewide costs of Indiana's system of assessment.

Counties were surveyed regarding the computer software and maintenance costs as well as the cost of billing and collecting property taxes. Based on 35 responses, counties spend between $0.35 and $3.37 per parcel annually on computer costs related to the assessment system and between $0.23 and $7.47 per parcel annually on the county tax accounting system. In addition, based on 20 responses, counties spend between $0.39 and $1.51 per parcel annually on the billing and collection process. *Assuming this range of costs, and 2,971,281 parcels statewide, CAMA costs could range from $1 million to $10 million. Tax accounting system costs could range from $680,000 to $2.2 million, and billing and collection costs could range from $1.2 million to $4.5 million.*

To pay for the costs of reassessment, dedicated funds have been statutorily established in each county. In tracking expenditures by counties from the 92 reassessment funds, it is estimated that the total costs from the period 1997 to 2003 (the most current reassessment period) exceeded $135 million on a statewide basis. This amount does not include amounts spent from other county funds to support reassessment, just the amounts paid from the reassessment fund. An analysis of the reassessment fund expenditures on a per parcel basis shows that counties spent between $13 and $122 per parcel (an average of $46 per parcel) from the reassessment fund for the period from 1997 to 2003. There is no estimate for a true per parcel cost of reassessment on a statewide basis without an identification of what additional resources were used to support reassessment.

Costs of a New System

Depending upon the ultimate implementation path chosen for the common and uniform system, varying degrees of costs could be incurred. Each county currently incurs, and would continue to incur, annual support and maintenance costs. These costs typically cover computer hardware and software as well as the related human resource costs of managing the system and gathering, testing, and supporting the data.

These system costs would continue under a new system, however, there is an expectation that these would be reduced as a result of consolidation or economies of scale. Additionally, a new system would have start-up costs such as conversion of data, training, and computer software or hardware upgrades. It is not possible to determine what the net incremental costs or savings of a new property system would be on a county-by-county or statewide basis.

✓ Recommendations

Reassessment cost reports varied widely depending on a county's tracking method. Any specific claims of cost per parcel should be interpreted with some degree of latitude.

Until requirements are developed and vendor responses to RFPs are collected, true costs of any new system cannot be stated with certainty.

Cost Scenario 1: Status Quo - Each County Continues to Choose its own System

This scenario allows each county to continue to maintain its own property tax system and requires the DLGF to impose a more rigorous set of software standards to improve data integrity and access. There would be minimal costs to implementation of this. Even though implementation costs would be minimal, so would benefits derived from the approach. Without a change in process, software improvements, and with only a more stringent data requirement, there is no guaranty of consistency, uniformity, and integrity in the data.

Cost Scenario 2: Multi-vendor Options Chosen by County, Using State Buying Power

This scenario allows each county to choose its own hardware and software, but with significant savings realized by using the State of Indiana to coordinate purchasing. The State has significant buying power regarding various types of commodities and services. Through the use of its Quantity Purchase Award (QPA) program, the State makes bargain purchasing available to local units of government as well as state agencies and institutions.

Many counties have purchased the computer hardware used in assessment and reassessment through the software vendor. Savings could be realized just in the purchase of hardware and the non-CAMA and tax software (Microsoft Windows® for example) that are used in those systems. The State, through consolidating purchasing power between the CAMA and tax system vendors, could also bring this purchasing power to bear for the benefit of the local units. Savings would be realized on a statewide basis with minimal cost whether there is an immediate change of systems as a part of this solution or if systems were not changed until each county's contract had been up for renewal.

Cost Scenario 3: Single System in Use in Every County

This scenario assumes a single statewide system would be implemented in every county regardless of size or number of parcels. The cost would initially be greater than the total current annual costs incurred by each county individually. This is due to an initial start-up cost of a new system versus the cost already incurred by each of the counties at the time of initial investment in their individual systems.

In addition, annual maintenance and operation costs would be incurred. The potential cost of a new system was estimated using standard industry methodology. The costs were estimated using a retail per seat cost less volume discount and including development and implementation costs as well as annual maintenance and update costs, but not including operating costs since such costs would be duplicative of costs already budgeted in each county.

The following is an estimate of costs for implementing a uniform statewide system:

Potential Cost of Purchase and Installation of System[1]

Hardware	$ 7,500,000
Software (list)	20,000,000
Software Discount	(10,000,000)
Implementation	40,000,000
Total Capital Cost	57,500,000

Annual cost of System:

Hardware Maintenance	$ 1,500,000
Software Maintenance	4,000,000
Amortization of System Cost	12,470,000
Total Annual Cost (first 5 years)	17,970,000

[1] Note: These costs are included to illustrate the order of magnitude of a complete replacement of every county's CAMA & Tax system, along with the associated implementation costs of data conversion, training, and process improvement. Depending on the software vendor chosen and the responses to any future RFP, these costs could vary widely. The assumptions below are critical to interpreting these estimates correctly as a wide variety of differing cost models could be created based upon various configurations of assumptions. The likely 'high" cost estimation is listed.

Assumptions to calculate the estimated cost:

1. Hardware costs of approximately $7.5 million are calculated as $50,000 per county for servers, PCs and connectivity, $400,000 for additional needs for larger counties, and $2.5 million for statewide communications infrastructure, backup, and other peripheral hardware needs. Specific needs will vary by county. For example, a county may have township assessors currently connecting to the existing county software through a dial-up Internet connection. As a result of a new system implementation, these costs could include upgrading those connections to some type of DSL or other broadband connection type such as a cable modem or a fractional T1 line.
2. Software costs of approximately $20 million are based on research and discussions with vendors using an estimate within a range believed to be from $16 million to $22 million in list price software costs for a full statewide system.
3. Software costs also assume that each of the 92 county's software systems would be replaced. This would not be required if an incumbent vendor were to be selected. For example, if a third of the counties already had software X, it is likely that software company X would be better positioned to submit a more aggressive bid.
4. Software discount of approximately 50% is based on experience with large installations and the large-scale buying power of the State as an entity. This amount could vary given the aggressiveness of the vendors during a bidding process and final negotiation.
5. Implementation cost is assumed to be two times the list price of software. This estimate would cover all data conversion, software training, project management, process redesign, and rollout support. This cost may come from several vendors as part of the implementation, not just the software supplier.
6. Total system cost of $57.5 million financed over five years at 3% interest for an annual payment of $12,470,000.
7. Annual Hardware Maintenance costs of 20% of cost of hardware.
8. Annual Software Maintenance costs of 20% of list price of software.

Implementation Considerations

Options 3, 4 and 5 described earlier each recommend the selection of a new system. Implementation of statewide property tax management system is a significant undertaking. To realize equally large, positive results, attention must be given to the definition of requirements, selection of a vendor, and management and quality assurance of the implementation process. Acknowledging the people and process involved, not just software, will be necessary for successful implementation. A three-phase approach is recommended when selecting a software system. These three phases are requirements definition, vendor selection, and contract negotiations and management.

Requirements Definition & RFP

This first phase focuses on accurately documenting the needs of the organization:

- Needs Identification – Gathering extensive information with system users.
- Requirements Definition – Users determine the list of detailed requirements and necessity level.
- RFP Issuance – A Request for Proposal (RFP) should be developed outlining the system needs.
- Bidder Conference – This meeting allows for vendors to understand the RFP and selection process.
- RFP Addendum – An addendum is distributed reflecting comments from the Bidding Conference.

Vendor Selection

The vendor selection phase focuses on tying the needs identified in the first phase to the capabilities of vendors. Strategic evaluation includes looking at vendors' vision and viability to ensure project success. Vendors are invited to display their abilities through a demonstration viewed by stakeholders in the decision-making process. The phase concludes with a final scoring of vendor responses and team agreement to the best alternative.

Contract Negotiations and Management

The final decision is made within the negotiation phase once an organization understands the vendor's pricing model, implementation plan, support structure, and service level agreements. Steps within the negotiation phase include general negotiation, final vendor selection, final terms and conditions negotiation, procurement, and ongoing support and contracting negotiation.

Other Statewide System Experiences

Indiana Statewide Case Management System (CMS)

The State of Indiana is rolling out a statewide comprehensive court Case Management System (CMS) to Indiana counties. The Justice Technology and Automation Committee (JTAC) is currently in the development stage and is expected to be piloted in a few counties in the fourth quarter of 2004. All counties will be dialing into a central system, in an architecture most similar to Option 5, "One Solution, One Installation", in the software architecture choices. Key lessons learned from the CMS experience include the high amount of communication required to the counties, the establishment of a program management office (PMO) with a dedicated implementation team, and the backing of committed project sponsor and organization. The team estimates approximately 10,000 users of the $7 million dollar software system will ultimately run two million cases per year. For more information: http://www.in.gov/judiciary/jtac/index2.html.

Indiana Bureau of Motor Vehicles STARS System

The Bureau of Motor Vehicles (BMV) had a decades-old system used to run its 163 branches throughout the State. Approximately 400 State-level users and 1,700 users in the field accessed the system. The new system – STARS – has been funded primarily through increased drivers' license re-instatement fees. The four-phase project started with a 1998 study on the issue, moved to a hardware replacement phase, system requirements definition phase, and finally detailed design and development phase. For more information: http://www.state.in.us/bmv/

Vermont Property Tax System Implementation

Like Indiana, the Vermont Department of Taxes, Division of Property Valuation and Review (PVR), found that a number of systems being used by towns were obsolete, paper based, and caused inequitable taxation and high appraisal costs.

Once PVR decided to replace the obsolete systems, it defined the primary goals and requirements of a new property tax system. These included a standard valuation process, and user-friendly system meeting current and future needs, appropriate for both small and large jurisdictions, and integration with Vermont's tax account system. The implementation used a dedicated project manager, steering committee, and phased implementation approach. Primarily through incentive, the State was able to implement the system in the vast majority of jurisdictions throughout the State. For additional detail on this project: http://www.state.vt.us/tax/deptdescriptions.htm.

Attachment A – Listing of CAMA and Tax Packages by Indiana County

County	CAMA Software Vendor	Tax Software Vendor	County	CAMA Software Vendor	Tax Software Vendor	County	CAMA Software Vendor	Tax Software Vendor	County	CAMA Software Vendor	Tax Software Vendor
Adams	ProVal	MVP	Franklin	ProVal	MVP	Lawrence	ProVal	MVP	Rush	ProVal	Legacy
Allen	ProVal	InHouse	Fulton	ACAMA	Legacy	Madison	IDS	IBM	St. Joseph	Plexis	MVP
Bartholomew	ProVal	MVP	Gibson	ProVal	MVP	Marion	In-house	In-house	Scott	ProVal	MVP
Benton	ACAMA	Legacy	Grant	Plexis	MVP	Marshall	ProVal	Legacy	Shelby	ProVal	MVP
Blackford	ACAMA	Legacy	Greene	ProVal	MVP	Martin	ProVal	MVP	Spencer	ProVal	Low
Boone	ACAMA	Legacy	Hamilton	ProVal	MVP	Miami	ACAMA	Legacy	Starke	ProVal	Legacy
Brown	ProVal	Legacy	Hancock	ProVal	MVP	Monroe	ACAMA	Legacy	Steuben	ProVal	MVP
Carroll	ACAMA	MVP	Harrison	ProVal	MVP	Montgomery	ProVal	MVP	Sullivan	ProVal	InHouse
Cass	ProVal	MHI	Hendricks	Plexis	Low	Morgan	ProVal	MVP	Switzerland	ProVal	MVP
Clark	Plexis	Low	Henry	CLT	CLT	Newton	Plexis	Legacy	Tippecanoe	In-house	InHouse
Clay	Plexis	Legacy	Howard	ProVal	MVP	Noble	Plexis	Low	Tipton	ProVal	Legacy
Clinton	ProVal	MVP	Huntington	ProVal	MVP	Ohio	ProVal	MVP	Union	ProVal	MVP
Crawford	ProVal	MVP	Jackson	ProVal	MVP	Orange	ProVal	MVP	Vanderburgh	ProVal	ACS-InHouse
Daviess	Plexis	Legacy	Jasper	ACAMA	Legacy	Owen	ProVal	MVP	Vermillion	Plexis	MVP
Dearborn	ProVal	MHI	Jay	Plexis	Legacy	Parke	App. Research	MVP	Vigo	ProVal	Unisys
Decatur	ProVal	Legacy	Jefferson	ProVal	Legacy	Perry	ProVal	Legacy	Wabash	ProVal	Legacy
Dekalb	ProVal	IBM	Jennings	ProVal	Legacy	Pike	ProVal	MVP	Warren	ProVal	Legacy
Delaware	IDS	InHouse	Johnson	ProVal	InHouse	Porter	Plexis	InHouse	Warrick	ProVal	MVP
Dubois	ProVal	MVP	Knox	ProVal	MVP	Posey	ACAMA	Legacy	Washington	ProVal	Legacy
Elkhart	In-house	InHouse	Kosciusko	ProVal	Low	Pulaski	ProVal	Legacy	Wayne	ProVal	Legacy
Fayette	ACAMA	Legacy	Lagrange	ProVal	Legacy	Putnam	ProVal	Low	Wells	ProVal	Legacy
Floyd	ProVal	Legacy	Lake	ACAMA	MVP	Randolph	ACAMA	Legacy	White	ProVal	Legacy
Fountain	Plexis	Legacy	Laporte	ProVal	Equitax	Ripley	ProVal	Low	Whitley	ProVal	MVP

Attachment B – Highlights from Discussions with Other States

This section provides highlights captured from discussions with other states regarding their current CAMA and Tax software arrangements. Only information pertinent to this study is included. These comments should be taken strictly as ad hoc feedback during phone interviews regarding statewide CAMA and tax system usage. None of these comments in any way represents an official opinion supported by these states, its agencies, or the jurisdictions within those states. "Common vendors" listed are those that were indicated by the representative, and may or may not represent a true picture of the full breadth and relative depth particular vendors may or may not have in a particular state.

Comments have been categorized into three areas: 1.) states where a statewide system has been implemented; 2.) states that have considered a statewide system implementation; and 3.) states without a statewide system.

Statewide System Implemented

Georgia

- The State of Georgia has a statewide system, however, the State does not fund or manage it. Rather, a group of end users formed a committee to develop and manage the system.
- The State does support the day-to-day operations of the system and provide training.
- Counties are free to adopt any system they choose, but the Statewide system is very inexpensive and therefore desirable.
- Other common vendors in Georgia are CLT (Oasis System) and Manatron for CAMA. Tax and billing vendors include Tailored Business Systems, Governmental Systems, Visacraft, and In House systems.

Idaho

- Manatron ProVal is currently replacing the mainframe system that was developed in house over 20 years ago. All counties are encouraged to begin using ProVal as the mainframe system is phased out. However, each county has option of adopting an alternate system.
- Currently, 34 of 44 counties use ProVal.
- The system is funded through State appropriations to the State Tax Commission.
- The State is pleased with performance.
- The State provides the access and technical support for the counties.

Kansas

- The State pays for the software through a "VIPS/Cama Fund" generated through open records access fees for real estate and BMV transactions. VIPS stands for vehicle information processing.
- In the past, a statewide system was mandated, despite some local resistance. However, today a statewide system is no longer mandated, but encouraged as support for old system fades.
- Kansas is currently implementing CLT's Orion System.
- The State appoints appraisers every four years in each county.
- The State performs the sales disclosure validation, procedural reviews, and sales ratio studies in each county.

- Most counties have their own tax and billing systems that interface with CLT's system.

Kentucky

- Kentucky does not have a statewide CAMA or tax and billing system. Rather, they have implemented a statewide personal property system.
- The State does not have statutory authority to mandate system use, except in the case of personal property.
- Many users are not considered highly computer sophisticated.

Montana

- All administrators of the Statewide system are State employees following a Constitutional Convention in Montana in 1972, which decided that responsibility for assessment would be placed in statewide system. Thus, state employees perform all assessing duties out of regional offices.
- Currently, the CLT AS400 system is used on a statewide basis for residential and commercial valuation as well as personal property.
- The State is looking toward upgrading to the CLT Orion system in the near future.
- The Department of Revenue is responsible for taking the valuation process through the tax bill.
- Local Treasurers bill and collect property taxes.
- 101 mills and university levies go toward state revenue for school state equalization funding.
- There are local levies for school and local government.
- An IAAO board member works for the State agency.

New Jersey

- New Jersey is nearing the completion of the procurement process for a statewide property tax system – it was ready to award a contract at the time this report was compiled.
- The State has authority to offer a statewide package.
- The new system will include a CAMA system, billing and collections, sales comparison, and parcel management (notices, forms).
- The State will pay for the software through direct appropriation for the purchase of a new system, but the municipalities will pay for their ISP connection and printing fees.

Oklahoma

- Oklahoma owns the contract with the vendor of the Statewide property tax system, TerraSoft, (owned by Novalis).
- According to Oklahoma, Novalis is in the process of developing an integrated GIS and CAMA system.
- The State fields questions from the counties to Novalis, rather than the counties directly contacting the vendor for support.
- The State considered hosting a centrally hosted solution, however, the counties prefer controlling their own software systems.
- Counties that are not adopting the Statewide system provided by Novalis are generally using TerraScan

and Colorado Customware.

Tennessee

- Tennessee's statewide system was developed in-house at the State level.
- Use of Tennessee's system is not mandated, but offered to counties.
- 90 of 95 counties chose to adopt the system. Vendors have come to Tennessee to market their systems, but none of the 90 counties have chosen to move off the Statewide system because they are happy with it.
- The Statewide system is centralized.
- The counties pay a .25 to .50 per parcel charge based on the service provided (e.g., software, printing costs, etc.).

Vermont

- The State has the authority to recommend a statewide system.
- The State performs annual sales ratio studies.
- Municipalities pay for the software, but the State provides support and training for those counties that choose to adopt the Statewide system.
- 175 of 262 municipalities use the system currently.
- The Statewide solution was developed by Microsolve and is called CAMA 2000.
- CAMA 2000 is integrated with the tax and billing system used in Vermont. The State was satisfied with the way Microsolve worked with the developer of the tax and billing system to ensure successful integration.
- Other vendors in Vermont include Manatron (Proval) and Patriot Properties.
- Because the State chose a small company to develop the CAMA system, the State became responsible for project management and quality assurance of the implementation process because the company was not considered adequately staffed.

West Virginia

- The counties are required by statute to use a statewide system.
- The State is currently in year three of four of statewide implementation of new software.
- The State contracted with CLT for implementation of IAS as well as data conversion from previous systems.
- Counties share in costs of the statewide computer network – server, phone/data lines, and state support fees.
- A statute was enacted in 1984/85 for creation of a statewide computer/property tax network. This statute laid out responsibilities of involved entities and groups, including costs.
- Prior to the statute enacted in the mid 1980s, counties were not required to be on the statewide system.
- Local officials were very supportive of the statewide system and funded a study on this issue.
- State employees and local assessors formed a group and agreed on what was needed and wrote an RFP and RFQ and had three companies that responded for RFP/RFQ.
- West Virginia believes that it is highly important to gain support and cooperation of the local officials prior

to implementation.

- The state provides technical and assessment training to counties in regional sessions. Hands-on training is provided on-site if necessary.

Wyoming

- Legislature has instructed all counties to be on one system.
- Previously, Wyoming possessed a statewide mainframe system.
- Currently, Wyoming is just beginning a two-year implementation of Colorado Customware.
- The Auditor and Treasurer use various tax and billing systems – the statewide system provides a generic dump of data that can be used by the different systems.
- AGJD, a property tax consulting firm, conducted independent study in 1999.
- The state also formed a committee of county assessors, employees from the State Board of Equalization, and the Department of Revenue to conduct the study.
- A user group meets during the year to set standards and maintain direction.

States that Have Considered a Statewide System Implementation

Missouri

- State of Missouri went through reassessment in the 1980s. There was discussion of adopting a standard system, however, too many counties were using different systems and the notion was dropped.
- Every county has a computerized system.
- All counties can generate an assessment roll, however, a few have to calculate their real estate.
- The state Tax Commission provides general oversight.
- The state conducts random ratio studies to compare and test county assessment levels.
- The state provides technical aid and assistance in analyzing markets.
- Common vendors in Missouri include Vanguard Appraisal, Equitech, MCODE, and Debnet.

Nebraska

- The state conducted studies for statewide CAMA and created a strategic plan for statewide GIS. Neither had adequate funding or local support and therefore they were unsuccessful initiatives.
- The counties manage themselves, as the state does not have authority to dictate which CAMA software a county uses.
- The state performs an annual study to measure the equity of assessments. The agency uses sales data that is hand entered in an agency database.
- Common vendors in Nebraska include TerraScan, County Solutions, MIPS, and Northeast Data Systems.

Oregon

- The state provides oversight and appraises industrial property valued at more than $1 million.
- They state has considered a statewide system, but there is resistance at the local level.

- The most common vendor in Oregon is Manatron.

No Statewide System Implementation

Florida

- There are no plans to implement statewide system, as Florida does not have statutory authority to mandate a statewide system.
- The notion is highly unpopular at the local level.
- The state approves or rejects assessment methods used by local officials.
- The state requires all counties to provide data in a standard record layout in order to perform data analysis and equalization studies.
- There are many counties using many different software packages. Most popular is ACS' CAMA USA package. Others are CLT, Patriot Properties, and Software Techniques.

Hawaii

- All counties are computerized and use CLT system but operate independently of one another
- State is striving toward more unified approach to government
- System operated on a statewide basis until 1981. In 1981, constituents voted to have system function on a county level.

Illinois

- Not all of counties are computerized, however majority has some type of software system.
- ICAS, Illinois Computer Appraisal System, is provided to qualifying jurisdictions for residential assessment. It is an option for small counties or jurisdictions without necessary funds to purchase a system. ICAS was developed in house by the state.
- The state provides technical assistance to counties.
- The state education program pays assessors $500 a year to apply toward two continuing education courses.
- The state issues a state multiplier to bring counties to appropriate level of assessment.
- Tax and billing is overseen by a different agency.
- Manatron is one common vendor in Illinois.

Iowa

- The state issues a required State Cost Appraisal Manual.
- Counties are computerized, but several jurisdictions are still using handwritten property record cards.
- Common software for Auditor and Treasurer are Solutions and CMF.
- Iowa has a Property Tax Implementation Committee. Reports issued from committee can be found at the following website: http://www.state.ia.us/tax/taxlaw/proptaxcomm.html
- The state performs sales ratio and equalization studies.
- The state administers property tax laws in an advisory or problem-solving manner.
- The state does not heavily oversee County operations.
- Counties have to submit abstracts of assessment and reconciliation reports on regular basis.
- All transactions and sales of property have to include a Declaration of Value statement that is sent to the state for sales ratio studies.
- The state is currently undergoing discussion on tax reform.
- Common vendors include Vanguard Appraisal, CLT, and Manatron.

Maine

- Maine does not assess property at the county level. Rather, it is performed at the municipal level.
- Maine does not use an electronic system.
- The state is generally satisfied with software systems that are being used.
- Maine is a home rule state. Therefore, the state has never considered a statewide system.
- The state provides oversight to municipalities and enforces laws made at state level for towns to follow.
- Municipalities are agents of the state, carrying out its duties. Therefore, the state has oversight of the municipalities.
- The state does not provide much oversight to the counties. Rather, they have a working relationship and provide more assistance and training.
- Common vendors in Maine include Vision, Patriot, Trio, and Northern Data.

Michigan

- Counties may or may not be computerized.
- Local units procure vendors who are state approved.
- Some local units have in house systems.
- Tax collection computerized systems have to be state approved.
- The state is currently pleased with systems.
- The state has mandated collection of state education tax. The Treasury uses a statewide system for this process.
- The relationship to counties is oversight and enforcement. The state has supervisory authority over all assessing personnel.

- The State Tax Commission certifies and approves collection and appraisal software.
- The state requires annual audits of local units and counties. These audits are conducted through local audit and finance division or through private auditors filing reports with the state.
- Manatron and BS&A are popular providers of collection programs for Treasurers.

North Dakota

- All counties are computerized.
- All counties use different software.
- The state gets reports from counties and discovers numbers of errors in them. Some are due to over reliance on competence of the computer program.
- The state supervises property tax system and provides direction to assessors. The appeals eventually go to State Board of Equalization.

Ohio

- Only 5% of counties are not computerized.
- The counties determine the system to use for assessment and tax and billing.
- Software is funded locally through the Real Estate Assessment Fund.
- There is no effort to pursue a statewide system.
- Ohio constituents can access property assessment information online.
- The state calculates effective tax rate, assesses exempt property, collects all the sales from the locals, and does equalization study.
- The state does some oversight of counties.
- Common vendors in Ohio include CLT, Appraisal Research, Manatron, Sabre, Digital Data Technology, Sigma Systems, and Partriot Properties.

South Dakota

- All of counties are computerized.
- Counties have their own data processing system.
- The counties are required to send data to the State.
- The state is not involved in how software works individually for the counties.
- The state has standardized forms that counties have to complete, many of which are required by the Secretary of Revenue.
- The state has minimal supervisory authority over the counties. They oversee general assessment and taxation procedures.
- Field staff from the state audit counties' data.
- Common vendors in South Dakota include CMS, formerly Stewarts Computer Software and SSI. The Auditor and Treasurer commonly use an Ultra Inc. package.

Washington

- All counties are computerized.
- Computer systems "generally work pretty well."
- State has oversight over administration of property tax laws on a general basis.
- The State reviews County Assessors' work and provides assistance and guidance.
- Common vendors in Washington include TerraScan, ASICS, and Computech.

Attachment C – Expenditures Paid from County Reassessment Fund 1997 through 2003

Attachment C shows a county-by-county breakdown of the costs. This amount does not include funds spent from other county funds to support reassessment, just the amounts paid from the reassessment fund.

	Adams	Allen	Bartholomew	Benton	Blackford	Boone	Brown	Carroll
1997	8,281	169,245	21,975	14,055	7,832	11,786	37,461	28,843
1998	13,640	184,781	13,902	38,384	7,594	4,428	52,051	11,977
1999	21,068	234,581	47,059	53,818	12,229	24,975	72,578	36,264
2000	8,824	125,340	28,964	103,411	152,507	60,164	267,495	45,980
2001	255,132	505,850	412,156	67,867	84,086	354,765	203,778	194,305
2002	57,738	1,440,365	358,275	133,314	79,361	243,300	145,352	330,504
2003	139,198	968,064	146,027	108,401	199,731	135,344	83,240	151,215
	503,881	**3,628,226**	**1,028,358**	**519,250**	**543,340**	**834,762**	**861,955**	**799,088**

	Cass	Clark	Clay	Clinton	Crawford	Daviess	Dearborn	Decatur
1997	154,672	60,373	25,966	39,568	28,243	12,098	188,003	38,455
1998	181,597	80,646	32,805	32,467	27,145	10,498	61,853	67,457
1999	167,556	72,585	61,431	615,711	39,615	89,848	106,905	94,047
2000	296,247	38,487	197,174	221,610	49,464	164,724	93,180	269,844
2001	103,845	371,365	319,681	258,986	58,207	170,621	105,512	209,504
2002	341,581	373,839	300,833	314,327	77,872	381,234	173,281	244,484
2003	144,344	745,574	262,776	244,593	322,578	139,004	1,043,147	205,870
	1,389,842	**1,742,869**	**1,200,666**	**1,727,262**	**603,124**	**968,027**	**1,771,881**	**1,129,661**

	DeKalb	Delaware	Dubois	Elkhart	Fayette	Floyd	Fountain	Franklin
1997	49,299	136,187	81,749	159,643	44,594	225,892	64,980	-
1998	84,625	167,756	11,932	504,158	89,248	124,609	53,930	14,956
1999	204,847	410,689	39,039	179,571	74,317	138,525	157,936	96,710
2000	224,194	776,242	13,937	50,013	186,765	495,111	80,700	179,385
2001	682,068	624,190	373,236	1,049,627	158,313	231,325	48,218	182,999
2002	363,378	571,269	234,926	41,857	198,481	258,325	138,151	243,893
2003	900,298	470,114	174,596	28,046	119,616	187,322	236,359	171,775
	2,508,709	**3,156,447**	**929,415**	**2,012,915**	**871,334**	**1,661,109**	**780,274**	**889,718**

Source: Audit Reports and County Annual Financial Reports for each County

	Fulton	Gibson	Grant	Greene	Hamilton	Hancock	Harrison	Hendricks
1997	59,510	78,601	190,198	26,478	-	104,057	142,414	180,915
1998	25,740	136,390	263,595	134,222	168,415	142,962	249,494	137,812
1999	54,331	191,194	392,222	56,248	221,420	110,569	123,693	311,894
2000	44,317	218,843	527,399	11,733	371,303	159,938	221,953	405,469
2001	46,122	230,432	427,641	274,877	551,088	318,727	354,439	434,301
2002	220,352	229,753	408,552	316,298	814,662	280,555	168,537	466,414
2003	107,543	134,727	611,289	158,992	445,797	290,127	231,491	387,740
	557,915	**1,219,940**	**2,820,896**	**978,848**	**2,572,685**	**1,406,935**	**1,492,021**	**2,324,545**

	Henry	Howard	Huntington	Jackson	Jasper	Jay	Jefferson	Jennings
1997	34,875	106,509	19,265	125,983	69,325	53,275	9,983	61,393
1998	46,520	237,373	50,122	55,610	1,993	39,592	23,638	21,851
1999	151,207	401,808	74,481	140,602	16,119	95,802	118,960	54,151
2000	250,332	298,341	238,451	84,671	167,904	195,909	487,973	49,940
2001	680,748	654,968	148,269	115,797	318,204	97,492	188,006	246,870
2002	488,292	709,653	159,748	219,405	234,051	119,453	184,382	198,547
2003	223,934	315,906	83,812	186,044	130,730	88,856	194,705	138,317
	1,875,908	**2,724,558**	**774,148**	**928,112**	**938,326**	**690,379**	**1,207,647**	**771,069**

	Johnson	Knox	Kosciusko	LaGrange	Lake	LaPorte	Lawrence	Madison
1997	61,775	150,738	295,108	-	-	17,184	41,482	12,692
1998	98,049	78,593	183,752	103,578	43	36,050	86,514	5,496
1999	120,056	34,963	194,911	71,499	340,722	154,063	61,785	68,520
2000	72,503	22,925	417,311	37,252	547,277	154,575	68,532	173,524
2001	262,806	263,555	437,989	292,563	608,225	348,177	51,446	311,677
2002	589,604	296,017	372,880	363,445	153,402	348,177	382,387	475,468
2003	593,054	803,555	339,551	180,668	7,259,859	501,391	267,481	278,052
	1,797,847	**1,650,346**	**2,241,502**	**1,049,005**	**8,909,528**	**1,559,617**	**959,627**	**1,325,429**

Source: Audit Reports and County Annual Financial Reports for each County

	Marion	Marshall	Martin	Miami	Monroe	Montgomery	Morgan	Newton
1997	1,362,525	14,025	4,608	58,630	108,209	28,273	-	61,795
1998	1,524,242	34,062	31,695	90,420	65,287	24,821	61,401	27,500
1999	1,927,255	50,585	48,450	148,903	139,200	39,103	85,940	114,502
2000	1,913,630	47,793	36,039	130,857	283,835	154,880	6,028	108,236
2001	2,287,766	481,437	36,484	1,462,560	889,630	229,204	201,758	165,658
2002	2,383,184	521,902	151,020	2,184,682	986,926	167,467	266,343	125,380
2003	2,697,191	678,347	206,943	171,181	988,262	172,225	221,216	151,761
	14,095,793	**1,828,151**	**515,239**	**4,247,233**	**3,461,349**	**815,973**	**842,686**	**754,832**

	Noble	Ohio	Orange	Owen	Parke	Perry	Pike	Porter
1997	45,124	17,907	8,538	6,455	48,818	2,374	56,040	196,819
1998	71,446	11,361	11,569	12,129	43,499	26,866	57,069	205,390
1999	170,950	65,337	33,401	29,543	52,845	19,179	61,777	438,469
2000	225,946	20,093	120,921	41,731	253,798	9,756	96,817	1,004,313
2001	193,074	85,976	104,080	190,468	261,497	87,859	137,279	579,287
2002	160,610	147,756	256,331	407,257	107,356	190,770	88,906	764,264
2003	413,547	65,933	287,522	120,633	84,941	146,884	161,870	356,409
	1,280,697	**414,363**	**822,362**	**808,216**	**852,754**	**483,688**	**659,758**	**3,544,951**

	Posey	Pulaski	Putnam	Randolph	Ripley	Rush	St. Joseph	Scott
1997	7,840	24,653	200,060	18,840	38,393	6,400	108,798	61,259
1998	17,195	47,229	113,706	43,183	34,481	36,709	366,817	43,232
1999	4,973	70,967	171,934	22,651	74,915	9,600	490,125	54,593
2000	18,711	112,111	241,046	81,550	149,036	62,046	513,756	64,971
2001	-	173,053	349,269	299,428	144,065	130,680	790,698	117,700
2002	73,605	150,570	352,956	453,986	157,368	148,808	1,627,058	276,156
2003	97,345	58,448	322,358	121,291	101,746	148,409	1,694,294	790,691
	219,669	**637,031**	**1,751,329**	**1,040,929**	**700,004**	**542,652**	**5,591,546**	**1,408,602**

Source: Audit Reports and County Annual Financial Reports for each County

	Shelby	Spencer	Starke	Steuben	Sullivan	Switzerland	Tippecanoe	Tipton
1997	64,936	25,074	37,223	50,900	84,505	80	291,093	97,207
1998	84,821	26,542	28,820	110,875	47,945	4,457	143,723	46,789
1999	223,632	40,431	71,515	70,719	59,716	8,696	65,379	65,379
2000	297,476	38,219	72,837	75,219	65,947	719	219,143	179,794
2001	219,097	162,311	257,890	120,981	184,467	103,165	720,489	167,058
2002	209,610	371,665	281,661	100,735	357,891	7,315	356,167	393,611
2003	197,141	103,885	211,011	221,905	188,686	42,509	486,359	165,688
	1,296,713	**768,127**	**960,957**	**751,334**	**989,157**	**166,941**	**2,282,353**	**1,115,526**

	Union	Vanderburgh	Vermillion	Vigo	Wabash	Warren	Warrick	Washington
1997	1,461	11,016	2,940	88,864	26,193	27,756	35,471	24,162
1998	-	181,025	2,325	73,735	16,510	16,797	27,143	29,654
1999	78,780	351,529	16,733	189,952	48,337	40,368	74,060	42,882
2000	78,780	699,017	32,797	199,831	-	81,601	144,485	52,271
2001	17,238	224,758	129,104	875,504	129,104	98,842	90,245	144,099
2002	43,668	819,821	255,265	1,355,093	115,294	149,288	846,824	294,685
2003	40,123	715,918	68,995	1,201,625	151,604	80,991	1,235,815	200,941
	260,050	**3,003,084**	**508,159**	**3,984,604**	**487,042**	**495,643**	**2,454,043**	**788,694**

	Wayne	Wells	White	Whitley	Total
1997	102,968	49,023	47,395	519	7,006,129
1998	133,457	31,982	35,966	12,894	8,256,612
1999	196,001	85,659	30,522	47,662	12,746,273
2000	220,242	152,817	26,065	20,040	17,713,337
2001	236,436	148,560	72,433	127,395	28,318,141
2002	304,908	226,989	331,404	153,989	34,372,518
2003	348,108	92,815	96,471	109,706	37,500,596
	1,542,120	**787,845**	**640,256**	**472,205**	**145,913,606**

Source: Audit Reports and County Annual Financial Reports for each County